CLAIMS:

1.   A method to configure a network device, comprising:

        receiving a request to configure a first permanent virtual circuit (PVC) between a

5   digital subscriber line (DSL) device and a DSL access module (DSLAM); and

        automatically configuring said first PVC using a list of probe values to probe for

configuration information for said PVC, and using said configuration information to

configure said first PVC.

10   2.   The method of claim 1, wherein said automatically configuring comprises:

        sending test packets to said DSLAM using said probe values;

        receiving a response packet to one of said test packets;

        retrieving said configuration information from said response packet; and

        configuring said PVC using said retrieved configuration information.

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3.   The method of claim 2, wherein for each probe value in said probe table said

sending comprises:

        retrieving a probe value from said list of probe values, wherein said probe value

represents a virtual circuit;

20   enabling said virtual circuit; and

        sending a test packet over said virtual circuit.

4.   The method of claim 3, further comprising disabling each virtual circuit that did

not receive a response packet.

5.   The method of claim 1, further comprising:

5   receiving a request to configure a second PVC for said DSL device;

receiving configuration information for said second PVC; and

configuring said second PVC using said configuration information.

6.   The method of claim 1, wherein said configuration information may comprise a

10   virtual channel identifier (VCI) and a virtual path identifier (VPI).

7.   The method of claim 1, further comprising:

determining that a terminating condition has occurred prior to automatically

configuring said first PVC;

15   sending a message that said first PVC was not configured to a user; and

receiving said configuration information for said first PVC from a user.

8.   A system to configure a network device, comprising:

a digital subscriber line (DSL) customer premise equipment (CPE);

20   a DSL access module (DSLAM) connected to said DSL CPE; and

a DSL probing module to use probe values to detect configuration information for

use in configuring a permanent virtual circuit (PVC) between said DSL CPE and said

DSLAM.

9. The system of claim 8, wherein said DSL CPE comprises a DSL CPE consisting essentially one of the following: a DSL/asynchronous transfer mode (ATM) router, an asymmetric DSL (ADSL)/ATM router, a DSL/ATM bridge, an ADSL/ATM bridge, a

5 DSL modem, and an ADSL modem.

10. The system of claim 8, wherein said PVC may be configured using configuration information comprising a virtual channel identifier (VCI) and a virtual path identifier (VPI).

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11. A probing module for a network device, comprising:

an event management module to send test packets using probe values from a digital subscriber line (DSL) device to a DSL access module (DSLAM);

a detection module to detect a packet received in response to at least one of said

15 test packets; and

an extraction module to retrieve configuration information from said received packet.

12. The probing module of claim 11, further comprising a configuration module to

20 configure a permanent virtual connection between said DSL and said DSLAM using said configuration information.

13. The probing module of claim 11, wherein said configuration information may comprise a virtual channel identifier (VCI) and a virtual path identifier (VPI).

14. An article comprising:

5   a storage medium;

said storage medium including stored instructions that, when executed by a processor, result in configuring a network device by receiving a request to configure a first permanent virtual circuit (PVC) between a digital subscriber line (DSL) device and a DSL access module (DSLAM), and automatically configuring said first PVC using alist

10   of probe values to probe for configuration information for said PVC, and using said configuration information to configure said first PVC.

15. The article of claim 14, wherein the stored instructions, when executed by a processor, result in automatically configuring said first PVC by sending test packets to

15   said DSLAM using said probe values, receiving a response packet to one of said test packets, retrieving said configuration information from said response packet, and configuring said PVC using said retrieved configuration information.

16. The article of claim 15, wherein the stored instructions, when executed by a

20   processor, result in sending test packets, for each probe value in said probe table, by retrieving a probe value from said list of probe values, wherein said probe value represents a virtual circuit, enabling said virtual circuit, and sending a test packet over said virtual circuit.

17.   The article of claim 16, wherein the stored instructions, when executed by a processor, further result in disabling each virtual circuit that did not receive a response packet.

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18.   The article of claim 14, wherein the stored instructions, when executed by a processor, further result in receiving a request to configure a second PVC for said DSL device, receiving configuration information for said second PVC, and configuring said second PVC using said configuration information.

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19.   The article of claim 14, wherein the stored instructions, when executed by a processor, further result in determining that a terminating condition has occurred prior to automatically configuring said first PVC, sending a message that said first PVC was not configured to a user, and receiving said configuration information for said first PVC from

15   a user.